

# **Product Evaluation**

WIN2051 | 1215

**Engineering Services Program** 

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

**Evaluation ID:** WIN-2051 **Effective Date:** December 1, 2015

**Re-evaluation Date:** December 2018

Product Name: HR-5410 Vinyl Horizontal Rolling Windows, Fin-Mounted and Replacement, Single and

Double Operable Sashes, Non-Impact Resistant

Manufacturer: PGT Industries

1070 Technology Drive North Venice, FL 34275 (941) 486-0100 (Ext. 21142)

#### **General Description:**

System	Description	Label Rating	Design Pressure Rating
1	HR-5410 Vinyl Horizontal Rolling Windows, fin-mounted, with a 3/4" nominal insulated glass lite composed of two 3/16" annealed glass sections and R4 aluminum reinforcement in the operable sash rails (X/O)	LC-PG65 75 X 72-HS	+65 / -70 psf
2	HR-5410 Vinyl Horizontal Rolling Windows, replacement, with a 3/4" nominal insulated glass lite composed of two 3/16" annealed glass sections and R4 aluminum reinforcement in the operable sash rails (X/O)	LC-PG65 75 X 72-HS	+65 / -70 psf

# **General Description (continued):**

System	Description (continued):	Label Rating	Design Pressure Rating
3	HR-5410 Vinyl Horizontal Rolling Windows, replacement, with a 3/4" nominal insulated glass lite composed of two 1/8" annealed glass sections and R2 aluminum reinforcement in the operable sash rails (X/0)	LC-PG65 75 X 54-HS	+65 / -70 psf
4	HR-5410 Vinyl Horizontal Rolling Windows, replacement, with a 3/4" nominal insulated glass lite composed of two 1/8" annealed glass sections and R1 aluminum reinforcement in the operable sash rails (X/O)	LC-PG50 75 X 54-HS	+50 / -50 psf
5	HR-5410 Vinyl Horizontal Rolling Windows, replacement, with a 3/4" nominal insulated glass lite composed of two 1/8" annealed glass sections and R3 aluminum reinforcement in the operable sash rails (X/O)	LC-PG50 75 X 63-HS	+50 / -50 psf
6	HR-5410 Vinyl Horizontal Rolling Windows, fin-mounted, with R4 aluminum reinforcement (X/O/X):  • Fixed Lite of 3/4" nominal insulated glass composed of two 3/16" annealed glass sections  • Operable Lites of 3/4" nominal insulated glass composed of two 1/8" annealed glass sections	LC-PG65 120 X 63-HS	+65 / -70 psf
7	HR-5410 Vinyl Horizontal Rolling Windows, fin-mounted, with R3 aluminum reinforcement (X/O/X):  • Fixed Lite of 13/16" nominal insulated glass composed of two 5/32" annealed glass sections  • Operable Lites of 3/4" nominal insulated glass composed of two 1/8" annealed glass sections	LC-PG50 120 X 63-HS	+50 / -50 psf

### **General Description (continued):**

System	Description	Label Rating	Design Pressure Rating
8	HR-5410 Vinyl Horizontal Rolling Windows, replacement, with R3 aluminum reinforcement (X/O/X):  Fixed Lite of 13/16" nominal insulated glass composed of two 5/32" annealed glass sections  Operable Lites of 3/4" nominal insulated glass composed of two 1/8" annealed glass sections	LC-PG50 120 X 63-HS	+50 / -50 psf

# Product Dimensions (1/2 - 1/2 and 1/4 - 1/2 - 1/4 Configurations):

System	Overall Size	Fixed Daylight Opening Size	Operable Daylight Opening Size
1	77-3/4" x 74-3/4"	33-1/4" x 67"	33-1/4" x 64-3/4"
2	75" x 72"	33-1/4" x 67"	33-1/4" x 64-3/4"
3	75" x 54"	33-1/4" x 48-7/8"	33-1/8" x 46-5/8"
4	75" x 54"	33-1/4" x 48-7/8"	33-1/8" x 46-5/8"
5	75" x 63"	33-1/4" x 58"	33-1/4" x 55-3/4"
6	122-3/4" x 65-3/4"	54-5/8" x 58"	26-3/4" x 55-3/4"
7	122-3/4" x 65-3/4"	54-5/8" x 58"	26-3/4" x 55-3/4"
8	120" x 63"	54-5/8" x 58"	26-3/4" x 55-3/4"

# **Product Identification (Certification Label on Window):**

System		
	Certification Agency	Keystone Certifications, Inc.
	Manufacturer's Name or Code Name	System 1, 2: CAR # 190-1041
		System 3: CAR # 190-1043
		System 4: CAR # 190-1044
		System 5: CAR # 190-1042
1 - 8		System 6: CAR # 190-1073
		System 7, 8: CAR # 190-1045
	Product Name	Systems 1-5: Model HR 5410 PVC Horizontal Slider XO
		Systems 6-8: Model HR 5410 PVC 1/4 – 1/2 – 1/4 Horizontal Slider
		XOX
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11

#### **Impact Resistance:**

System	Impact Resistant	Requirement
1 - 8	No	Provide an impact protective system when installing the product in the Inland I and Seaward zones.

#### Installation:

System		
	Type of Installation Wood Frame	
1, 6, 7	Wall Framing	Southern Pine (SPG ≥ 0.55) Dimension lumber
1, 6, 7 (FIN)	Fasteners	Minimum 8d Common Ring-Shank Nails
(FIIN)	Fasteriers	(2-1/2" long, 0.131" diameter)
	Fastener Penetration	Minimum 1-7/16" into the wall framing
	Type of Installation	Wood Frame
	Wall Framing	Southern Pine (SPG ≥ 0.55) Dimension lumber
		Minimum No. 10 x 1-3/4" Phillips Head, 18-8
2-5, 8		or 410 Stainless Steel Sheet Metal Screws
(FINLESS)	Fasteners	or
		Minimum No. 12 x 1-3/4" Phillips Head, 18-8
		or 410 Stainless Steel Sheet Metal Screws
	Fastener Penetration	Minimum 1-1/2" into the wall framing

#### **Supplemental Installation Instructions:**

Design Drawing: Install the windows in accordance with Drawing No. TDI-HR5410.1, titled "Vinyl HR Window TDI (Non-Impact)," sheets 1 through 4 of 4, dated March 17, 2015, signed and sealed by A. Lynn Miller, P.E., on March 17, 2015. This evaluation report refers to the stated drawings as the approved drawings.

**Note:** Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.